

**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1-12 Cancelled

13. (New) Method for reducing deviations between the effective current and the measured current in a pulse-width-modulated current control, in particular for electronic brake control units of motor vehicles,

wherein the measured current is determined at a certain predetermined time during an actuation period and a compensation is executed by way of compensation variables in response to temperature and supply voltage, which are added to the measured current so that a corrected nominal current is available for current control.

14. (New) Method as claimed in claim 13,  
wherein the supply voltage dependency is compensated.

15. (New) Method as claimed in claim 13,  
wherein the compensation variables are stored in a table, in particular in a data memory.

16. (New) Method as claimed in claim 13,  
wherein several loads are driven, and the compensation variables are fixed individually for each load, in particular for each valve coil.

17. (New) Method as claimed in claim 15,  
wherein an interpolation is carried out for temperatures lying between two table values in order to determine the optimal compensation variable.

18. (New) Method as claimed in claim 15,  
wherein an interpolation is carried out for supply voltages lying between two table values in order to determine the optimal compensation variable.

19. (New) Method as claimed in claim 13,  
wherein an averaging operation is executed by way of the present nominal value and

previous nominal values to compensate abrupt changes in nominal values.

20. (New) Method as claimed in claim 13,

wherein the temperature is determined indirectly by way of the Duty Cycle adjusted by current control.

21. (New) Method as claimed in claim 19,

wherein the sum of the coil resistor and the resistor of the connected semiconductor component for driving the load is taken into consideration for the determination of temperature.

22. (New) Method as claimed in claim 19,

wherein the Duty Cycles of several PWM periods are averaged for temperature measurement or the determination of the indirect temperature value.

23. (New) Method as claimed in claim 19,

wherein the nominal resistance value of the coil is used at the presently measured or estimated temperature of the control unit for the average value of the indirectly determined temperature quantity directly after the switching on of the ignition, in particular after the ignition's re-start.

24. (New) Circuit arrangement for driving several inductive loads comprising a circuit for the PWM control of the load current,

wherein the method as claimed in claim 13 is implemented as a program in a microcomputer or microcomputer system which is electrically connected to the PWM circuit.

25. (New) Circuit arrangement for driving several inductive loads comprising a circuit for the PWM control of the load current, in particular according to claim 24,

wherein the method as claimed in claim 13 is realized at least in part by digital logic.